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DATE: 11/06/91  
TO:  
PATREA L. PABST  
KILPATRICK & CODY  
3100 EQUITABLE BLDG.  
100 PEACHTREE ST.  
ATLANTA, GA 30303

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

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ASSIGNOR:  
LIOTTA, DENNIS C.

DOC DATE: 08/19/91

ASSIGNOR:  
SCHINAZI, RAYMOND F.

DOC DATE: 08/20/91

ASSIGNOR:  
CHOI, WOO-BAEG

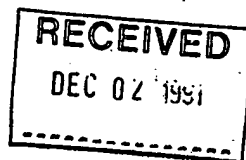
DOC DATE: 08/20/91

RECORDATION DATE: 09/18/91 NUMBER OF PAGES 005 REEL/FRAME 5876/0364

DIGEST :ASSIGNMENT OF ASSIGNORS INTEREST

ASSIGNEE:  
EMORY UNIVERSITY  
A CORPORATION OF GA  
1380 S. OXFORD ROAD, ATLANTA, GA 30322

SERIAL NUMBER 7-736089 FILING DATE 07/26/91  
PATENT PATENT ISSUE DATE 00/00/00



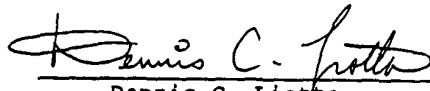
DOCKETED: \_\_\_\_\_  
BY: LFR  
DATE: 12/4/91

ASSIGNMENT

We, Dennis C. Liotta of 793 Post Road Way, Stone Mountain, Georgia 30088, Raymond F. Schinazi of 1524 Regency Walk Drive, Decatur, Georgia 30333 and Woo-Baeg Choi of 1061 Schmidt Lane, North Brunswick, New Jersey 08902, in consideration of Five Dollars and other valuable consideration paid to us by Emory University, a corporation of Georgia, having its principal place of business at 1380 S. Oxford Road, Atlanta, Georgia 30322, the receipt of which is hereby acknowledged, do hereby sell, assign and transfer unto said Emory University, its successors and assigns, subject to the terms and conditions stated in the present Emory University Patent Policy, and subject to any rights of the United States of America in this invention, the entire interest for the United States of America and all foreign countries including all rights of priority under the International Convention for the Protection of Industrial Property in a certain invention or improvement in "Method of Resolution and Antiviral Activity of 1,3-Oxathiolane Nucleoside Enantiomers" described in U.S. Serial No. 07/736,089 filed July 26, 1991, in the United States Patent and Trademark Office, which is a continuation-in-part application of U.S. Serial No. 07/659,760 entitled "Method for the Synthesis, Compositions and Use of 2'-Deoxy-5-Fluoro-3'-Thiacytidine and Related Compounds" filed on February 22, 1991 by Dennis C. Liotta, Raymond F. Schinazi and Woo-Baeg Choi, which is a continuation-in-part application of U.S. Serial No. 07/473,318 entitled "Method and Compositions for the Synthesis of BCH-189 and Related Compounds" filed February 1, 1990 by Dennis C. Liotta and Woo-Baeg Choi, and in all Letters Patent of the United States and all foreign countries which may or shall be granted on said invention, or any parts thereof, or on said application, or any divisional, continuing, reissue or other applications based in whole or in part thereon. And we agree, for ourselves and our executors and administrators, with said corporation and its successors and assigns but at its or their expense or charges, hereafter to execute all applications, amended specifications, deeds or other instruments, and to do all acts necessary or proper to secure the grant of Letters Patent in the United States and in all other countries to said corporation, with specifications and claims in such form as shall be approved by the counsel of said corporation and to vest and confirm in said corporation, its successors and assigns, the legal title to all such patents.

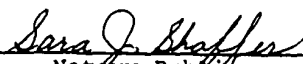
And we do hereby authorize and request the Commissioner of Patents and Trademarks of the United States to issue such Letters Patent as shall be granted upon said application or applications based thereon to said corporation, its successors and assigns.

WITNESS my hand and seal this 19 day of August, 1991.

  
Dennis C. Liotta

State of \_\_\_\_\_ )  
County of \_\_\_\_\_ ) ss.

Then personally appeared the above named Dennis C. Liotta and acknowledged the foregoing instrument to be his free act and deed, before me, this 19 day of August, 1991.

  
Notary Public

Notary Public, DeKalb County, Georgia  
My Commission Expires Feb. 7, 1994

REC-5876 FRANK 366

U.S.S.N. 07/736,089  
Filed: July 26, 1991  
ASSIGNMENT

WITNESS my hand and seal this 20th day of August,  
1991.

Raymond F. Schinazi  
Raymond F. Schinazi

State of \_\_\_\_\_ ) ss.  
County of \_\_\_\_\_

Then personally appeared the above named Raymond F. Schinazi  
and acknowledged the foregoing instrument to be his free act and  
deed, before me, this 20th day of August, 1991.

Notary Public  
Notary Public, DeKalb County, Georgia  
My Commission Expires Apr. 11, 1994

WITNESS my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_,  
1991.

\_\_\_\_\_  
Woo-Baeg Choi

State of \_\_\_\_\_ ) ss.  
County of \_\_\_\_\_

Then personally appeared the above named Woo-Baeg Choi and  
acknowledged the foregoing instrument to be his free act and deed,  
before me, this \_\_\_\_\_ day of \_\_\_\_\_, 1991.

\_\_\_\_\_  
Notary Public

REU5876 IMHC367

U.S.S.N. 07/736,089  
Filed: July 26, 1991  
ASSIGNMENT

WITNESS my hand and seal this \_\_\_\_\_ day of \_\_\_\_\_,  
1991.

\_\_\_\_\_  
Raymond F. Schinazi

State of \_\_\_\_\_ ) ss.  
County of \_\_\_\_\_

Then personally appeared the above named Raymond F. Schinazi  
and acknowledged the foregoing instrument to be his free act and  
deed, before me, this \_\_\_\_\_ day of \_\_\_\_\_, 1991.

\_\_\_\_\_  
Notary Public

WITNESS my hand and seal this 20th day of August,  
1991.

Woo-Baeg Choi  
Woo-Baeg Choi

State of New Jersey ) ss.  
County of Union

Then personally appeared the above named Woo-Baeg Choi and  
acknowledged the foregoing instrument to be his free act and deed,  
before me, this 20 day of August, 1991.

MARILYN M. HARPER  
NOTARY PUBLIC OF NEW JERSEY  
My Commission Expires Aug. 1, 1994  
\_\_\_\_\_  
Notary Public

Marilyn M. Harper

REEL 5876 FRAME 368

RECORDED  
PATENT & TRADEMARK OFFICE

SEP 18 91



13

**DECLARATION FOR PATENT APPLICATION**

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name;

I believe I am the original, first and sole inventor (if only one name is listed below), or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled: "Method of Resolution and Antiviral Activity of 1,3-Oxathiolane Nucleoside Enantiomers"

the specification of which (check one)

\_\_\_\_\_ is attached hereto  
☒ was filed on July 26, 1991  
as application Serial No. 07/736,089  
\_\_\_\_\_ and was amended on: \_\_\_\_\_  
(if applicable)

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, § 1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, § 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)	Priority Claimed
_____ (Number)	_____ (Country)
_____ (Number)	_____ (Country)
_____ (Number)	_____ (Country)

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of the application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

continuation-in-part of U.S.S.N. 07/659,760 (Application Serial No.)	<u>February 22, 1991</u> (Filing Date)	<u>Pending</u> Status (patented, pending, abandoned)
continuation-in-part of U.S.S.N. 07/473,318 (Application Serial No.)	<u>February 1, 1990</u> (Filing Date)	<u>Pending</u> Status (patented, pending, abandoned)

U.S.S.N. 07/736,  
Filed: July 26, 1991  
DECLARATION

As named inventor, I hereby appoint the following attorney(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

John S. Pratt	29,476
James L. Ewing, IV	30,630
Patrea L. Pabst	31,284
Jamie L. Greene	32,467
Cheryl K. Zalesky	33,052
Dean W. Russell	33,452
Larry W. Stults	34,025

Send Correspondence to: Patrea L. Pabst, Esq.  
Kilpatrick & Cody  
100 Peachtree Street, Suite 3100  
Atlanta, Georgia 30303

Direct telephone calls to: Patrea L. Pabst (404)572-6508, or  
John S. Pratt (404)572-6367

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inventor Dennis C. Liotta  
Inventor's signature *Dennis C. Liotta* Date 8/17/91  
Residence 793 Post Road Way, Stone Mountain, Georgia 30088  
Citizenship United States  
Post Office Address Same as above

Full name of second joint inventor (if any) Raymond F. Schinazi  
Inventor's signature \_\_\_\_\_ Date \_\_\_\_\_  
Residence 1524 Regency Walk Drive, Decatur, Georgia 30333  
Citizenship United States  
Post Office Address Same as above

EMU105CIP

"Method of Resolution and Antiviral Activity  
of 1,3-Oxathiolane Nucleoside Enantiomers"

DECLARATION

As named inventor, I hereby appoint the following attorney(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith.

John S. Pratt	29,476
James L. Ewing, IV	30,630
Patrea L. Pabst	31,284
Jamie L. Greene	32,467
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John S. Pratt (404)572-6367

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Full name of sole or first inventor Dennis C. Liotta

Inventor's signature \_\_\_\_\_ Date \_\_\_\_\_

Residence 793 Post Road Way, Stone Mountain, Georgia 30088

Citizenship United States

Post Office Address Same as above

Full name of second joint inventor (if any) Raymond F. Schinazi

Inventor's signature *Raymond F. Schinazi* Date 8.5.91.

Residence 1524 Regency Walk Drive, Decatur, Georgia 30333

Citizenship United States

Post Office Address Same as above

U.S.S.N. 07/736  
Filed: July 26, 1991  
DECLARATION

Full name of third joint inventor (if any) Woo-Baeg Choi  
Inventor's signature WooBaeg Choi WooBaeg Choi Date 9/20/91  
Residence 1061 Schmidt Lane, North Brunswick, New Jersey 08902  
Citizenship Republic of Korea  
Post Office Address Same as above

Full name of fourth joint inventor (if any) \_\_\_\_\_  
Inventor's signature \_\_\_\_\_ Date \_\_\_\_\_  
Residence \_\_\_\_\_  
Citizenship \_\_\_\_\_  
Post Office Address \_\_\_\_\_

Full name of fifth joint inventor (if any) \_\_\_\_\_  
Inventor's signature \_\_\_\_\_ Date \_\_\_\_\_  
Residence \_\_\_\_\_  
Citizenship \_\_\_\_\_  
Post Office Address \_\_\_\_\_

Full name of sixth joint inventor (if any) \_\_\_\_\_  
Inventor's signature \_\_\_\_\_ Date \_\_\_\_\_  
Residence \_\_\_\_\_  
Citizenship \_\_\_\_\_  
Post Office Address \_\_\_\_\_